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WATER SUPPLY OUTLOOK FOR IDAHO



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

IDAHO DEPARTMENT OF WATER RESOURCES

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
JUNE 1, 1978

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SOME OF THE DATA IN THIS REPORT HAVE BEEN RECEIVED THROUGH THE SOIL CONSERVATION SERVICE'S NEW SNOTEL SYSTEM WHICH TRANSMITS INFORMATION VIA THE SPACE AGED METEOR BURST METHOD FROM DATA SITES TO MASTER STATIONS LIKE THESE.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK for IDAHO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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WATER SUPPLY OUTLOOK for IDAHO



GENERAL SUMMARY FOR JUNE 1, 1978

Water supplies for Idaho are forecast to be generally adequate for the 1978 irrigation season. Major snowmelt is starting in the high mountainous areas and streamflow is increasing in an orderly manner. Major reservoirs are expected to fill or contain adequate supplies for irrigation demands.

Precipitation was well above normal during May in Northern and Eastern Idaho and below normal in the South and Western part of the state. Temperatures in general were slightly below average.

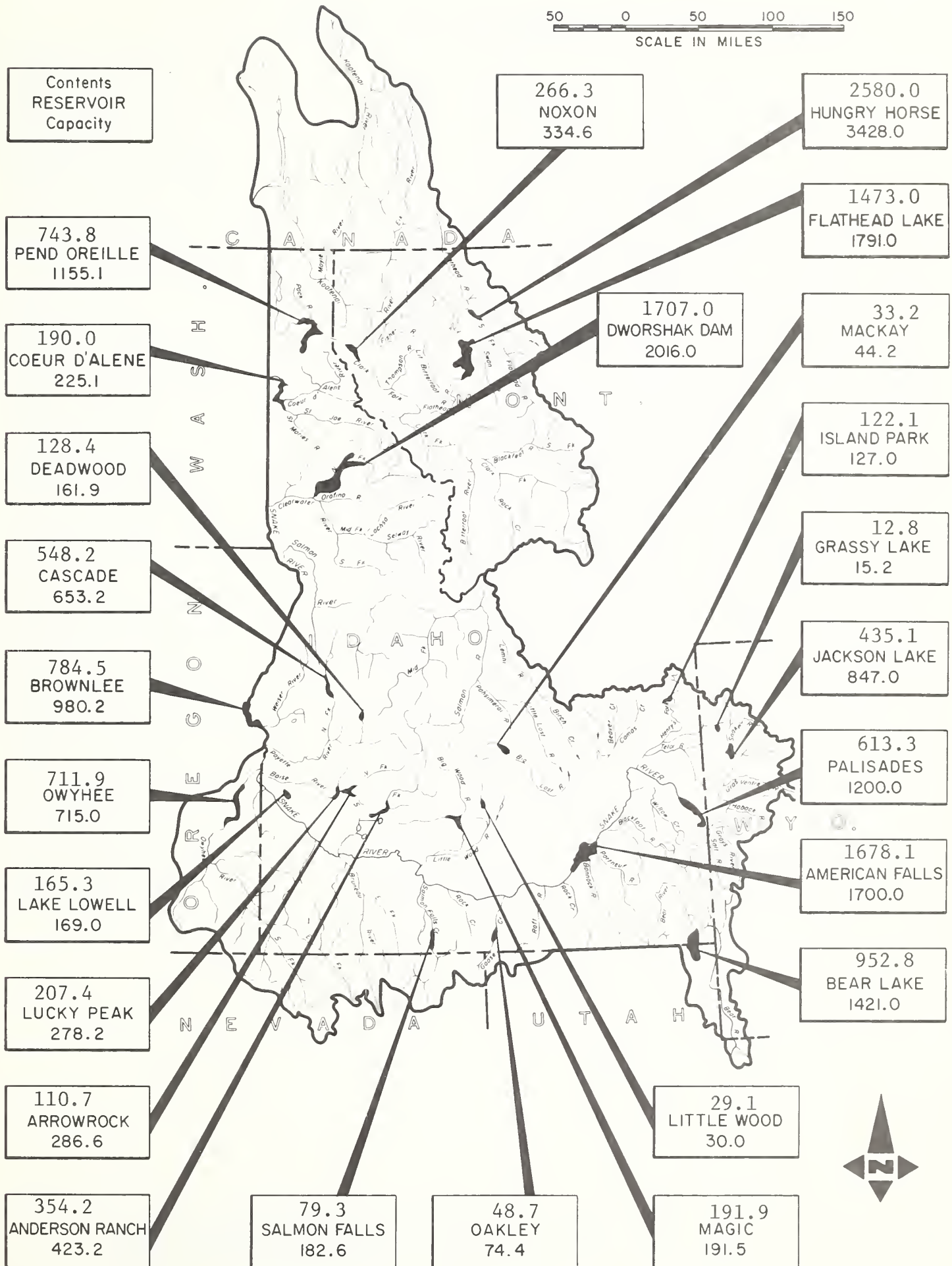
This report carries the June 1 and supplemental measurements for 1978 and corrections of previously published 1978 data.

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

June 1, 1978

50 0 50 100 150
SCALE IN MILES



SNOW

i

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average ¹

JUNE 1, 1978 MEASUREMENTS

Atlanta Summit	7500	5/30	59	30.7	--	--
Bear Canyon	7920	5/30	15	6.2	--	--
Big Creek Summit	6600	5/31	53	29.6	--	--
Bogus Basin	6120	6/1	0	0.0	--	--
Brundage Mountain	7560	5/31	91	46.8	--	--
Coolwater Mountain	6200	6/1	52	21.0	--	--
Copper Basin	7650	5/30	0	0.0	--	--
Crater Meadows	6100	6/1	60	29.6	--	--
Crawford Ranger Station	4800	5/31	0	0.0	--	--
Darby Canyon	8250	6/4	35	16.6	--	--
Elk Butte	5550	6/1	0	0.0	--	--
Fishpole Lake	9350	5/30	66	32.2	--	--
Freds Mountain	8000	6/4	29	15.0	--	--
Galena Summit	8795	5/26	56	26.2	--	--
Garns Mountain	8300	6/4	70	37.7	--	--
Goat Lake	6600	6/1	91	40.8	--	--
Granite Peak	6000	6/1	58	24.8	--	--
Hemlock Butte	5500	6/1	60	24.4	--	--
Indian Meadows	8200	6/4	69	36.6	--	--
Jackpine Creek	7500	6/4	0	0.0	--	--
Jackson Peak	7070	5/30	45	24.3	--	--
Lake Fork	6000	5/30	0	0.0	--	--
Lost Lake	6000	6/1	79	35.8	--	--
Lost Wood Divide	7900	5/30	24	11.2	--	--
Lookout	5250	5/30	29	14.8	--	--
Mascot Mine	7900	5/30	0	0.0	--	--
Moores Creek Summit	6100	6/1	35	17.5	--	8.1
Orogrande Mountain	7800	6/1	95	38.0	--	--
Schweitzer Bowl	4500	5/31	0	0.0	--	--
Schweitzer Ridge	6100	5/31	72	39.7	--	--
Secesh Summit	6600	5/31	36	20.1	--	--
Stickney Mill	7500	5/30	0	0.0	--	--
Squaw Meadow	5800	5/31	28	14.8	--	--
Trinity Mountain	7780	5/30	67	36.5	--	--
Vienna Mine	8960	5/30	71	37.6	--	--

(b) 1958-72, 15 year period. # Not located directly on this drainage. ¹ Estimated 1958-72, 15 year Average. (A) Aerial observation. W Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.



SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average

SUPPLEMENTAL MEASUREMENTSDECEMBER 1, 1977

Willow Flat	6100	11/30	18	3.9	--	--
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DECEMBER 15, 1977

Above Burke	4100	12/12	34	7.7	--	--
Lookout	5120	12/12	62	14.3	--	--
Moore's Creek Summit	6100	12/16	55	15.0	--	--

JANUARY 1, 1978

Benton Meadow	2370	1/3	23	5.3	--	--
Kilgore	6200	12/29	17	4.2	--	--

JANUARY 15, 1978

Atlanta Summit	7500	1/13	89	25.4	1.7	--
Bad Bear	5500	1/13	38	10.8	--	--
Graham Guard Station	5690	1/13	56	15.0	1.3	--
Jackson Peak	7070	1/13	81	24.2	2.6	--
Moore's Creek Summit	6100	1/13	82	23.7	2.1	--
Mount Baldy	9000	1/13	51	13.6	1.8	--
Pierce Ranger Station	3170	1/16	25	6.8	--	--
Trinity Mountain	7780	1/13	96	33.1	2.1	--
Vienna Mine	8960	1/13	90	28.0	2.9	--

FEBRUARY 1, 1978

Mosquito Ridge	5110	2/6	93	30.6	8.6	--
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FEBRUARY 15, 1978

Atlanta Summit	7500	2/16	119	37.5	1.8	--
Bad Bear	5500	2/14	52	15.9	0.0	--
Bogus Basin	6120	2/15	81	22.8	2.2	--
Bogus Basin Road	5360	2/15	36	10.6	0.0	--
Cozy Cove	5400	2/16	62	19.0	--	--
Galena	7300	2/14	71	21.4	0.0	--
Galena Summit	8795	2/14	82	25.2	2.2	--
Graham Guard Station	5690	2/16	67	21.2	1.2	--
Jackson Peak	7070	2/16	101	33.7	2.0	--

(b) 1958-72, 15 year period. #Not located directly on this drainage. * Estimated 1958-72, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

iii

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average ^b

FEBRUARY 15, 1978 (Cont'd.)

Moore's Creek Summit	6100	2/14	107	34.2	2.2	--
Mount Baldy	9000	2/13	81	23.2	1.8	16.4
Pierce Ranger Station	3170	2/15	33	9.6	3.0	--
Trinity Mountain	7780	2/16	128	44.9	1.8	--
Vienna Mine	8960	2/16	109	37.7	2.9	--

MARCH 15, 1978

Above Burke	4100	3/13	58	20.7	12.2	--
Atlanta Summit	7500	3/15	105	39.5	5.9	--
Bad Bear	5500	3/14	44	16.8	2.9	--
Bogus Basin	6120	3/16	73	26.2	6.8	--
Bogus Basin Road	5360	3/16	19	7.1	3.0	--
Crater Meadows	6100	3/15	123	39.5	--	--
Crooked Fork	3600	3/14	45	14.4	--	--
Elk Butte	5550	3/15	94	28.9	--	--
Fish Lake Airstrip	5000	3/15	114	36.5	--	--
Fourth of July Summit	3200	3/13	27	8.8	5.6	--
Galena	7300	3/14	60	21.2	2.8	--
Galena Summit	8795	3/14	74	25.9	4.6	--
Graham Guard Station	5690	3/15	56	21.7	4.0	--
Hemlock Butte	5500	3/15	130	41.9	--	--
Jackson Peak	7070	3/15	92	35.2	7.4	--
Lookout	5120	3/13	89	34.2	15.4	--
Lolo Pass	5240	3/14	88	32.5	--	--
Lost Lake	6000	3/15	146	45.9	--	--
Mascot Mine	7900	3/14	48	16.6	--	--
Moore's Creek Summit	6100	3/14	97	36.4	7.2	--
Mount Baldy	9000	3/13	75	26.6	3.6	19.7
Pierce Ranger Station	3170	3/15	29	10.0	6.0	11.1
Prairie	4900	3/15	13	4.5	0.6	--
Rock Flat Summit	5200	3/17	57	20.6	--	--
Savage Pass	6170	3/14	86	29.0	--	--
Shanghai Summit	4600	3/15	76	23.2	--	--
Sherwin	3200	3/15	29	8.7	5.2	14.2
Trinity Mountain	7780	3/15	119	48.0	6.2	--
Vienna Mine	8960	3/15	100	39.8	6.4	--

APRIL 15, 1978

Atlanta Summit	7500	4/14	92	38.7	6.3	--
Bad Bear	5500	4/13	20	8.1	0.0	--
Galena	7300	4/14	42	19.6	0.0	--
Galena Summit	8795	4/14	74	28.9	5.4	--
Graham Guard Station	5690	4/14	30	13.9	0.0	--
Jackson Peak	7070	4/14	76	35.6	6.4	--
Lookout	5120	4/14	69	30.3	15.3	--

(b) 1958-72, 15 year period. #Not located directly on this drainage. * Estimated 1958-72, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.



SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ^b

APRIL 15, 1978 (Cont'd.)

Moores Creek Summit	6100	4/13	83	35.9	6.6	31.7
Mosquito Ridge (A)	5110	4/16	68	26.9	--	--
Mount Baldy	9000	4/13	70	27.2	--	--
Pierce Ranger Station	3170	4/12	1	0.6	1.3	--
Prairie	4900	4/15	0	0.0	0.0	--
Trinity Mountain	7780	4/14	102	48.2	6.9	--
Vienna Mine	8960	4/14	94	43.1	8.7	--

MAY 1, 1978

Black Canyon	7850	5/1	82	41.6	--	--
Black Moose	8125	5/1	89	44.4	--	--
Latham Springs	7630	5/1	51	37.2	--	--
Lucky Dog	6900	5/1	39	19.8	--	--

MAY 15, 1978

Atlanta Summit	7500	5/19	70	35.1	--	--
Bad Bear	5500	5/14	0	0.0	--	--
Bogus Basin	6120	5/15	29	14.0	--	--
Crater Meadows	6100	5/18	72	33.6	--	--
Elk Butte	5550	5/18	24	9.2	--	--
Galena	7300	5/15	10	5.5	--	--
Galena Summit	8795	5/15	63	29.4	--	--
Hemlock Butte	5500	5/18	79	31.6	--	--
Jackson Peak	7070	5/19	55	28.9	--	--
Lookout	5120	5/15	43	22.5	0.4	--
Lost Lake	6000	5/18	96	42.0	--	--
Moores Creek Summit	6100	5/14	56	26.7	--	--
Trinity Mountain	7780	5/14	85	44.5	--	--
Vienna Mine	8960	5/19	85	44.3	--	--

CORRECTIONS TO PREVIOUSLY PUBLISHED 1978 DATAMARCH 1, 1978

Antelope Ridge	5900	3/3	26	9.2	0.2	6.1*
Garns Mountain	8300	3/4	106	38.7	8.8	--
Roland Summit (A)	5200	3/2	86	29.9	10.0	31.3*

MAY 1, 1978

Cedar Creek (A)	7000	5/8	0	0.0	--	--
Hemlock Butte	5500	5/2	90	35.4	16.8	54.4*
Hummingbird Spring (A)	8950	5/8	62	28.8	5.5	26.2
Wilson Creek (A)	7500	5/8	0	0.0	--	--

(b) 1958-72, 15 year period. #Not located directly on this drainage. * Estimated 1958-72, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

Agencies and Organizations Cooperating in Idaho Snow Surveys

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U.S. Army Engineers

U.S. Department of Agriculture
Forest Service
Agricultural Research Service
Statistical Reporting Service

U.S. Department of Commerce
NOAA, National Weather Service

U.S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Water Resources Division, Geological Survey
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

The Montana Power Company
Washington Water Power Company
Idaho Power Company
Utah Power and Light Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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